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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,773	09/23/2005	Hironori Endo	Q86691	2226
72875 7590 06/13/2008 SUGHRUE MION, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037				
EXAMINER NGUYEN, LAMSON D				
ART UNIT		PAPER NUMBER		
2861				
NOTIFICATION DATE		DELIVERY MODE		
06/13/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@sughrue.com  
kglyndman@sughrue.com  
USPatDocketing@sughrue.com

### Office Action Summary

**Application No.**

10/526,773

**Applicant(s)**

ENDO, HIRONORI

**Examiner**

Lamson D. Nguyen

**Art Unit**

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Restriction election dated 04/24/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 3-6, 10-12, 15, 19, 20, 22, 25 and 28 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 13, 14, 16-18, 23, 24, 26 and 27 is/are rejected.
- 7) ☒ Claim(s) 7-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Final Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 03/08/05, 10/16/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 3-6, 10-12, 15, 19-20, and 22, 25, and 28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 04/24/08.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 13-14, 16-18, and 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Egawa Hiromi (JP 2000-001033).

***Egawa Hiromi teaches a liquid ejecting apparatus comprising:***

#### **Claims 1-2, 26-27:**

- a movable ejection head for ejecting a liquid (figure 1, head 12); a feed mechanism for feeding a medium (figure 1, medium transfer part 3); and detecting means for detecting a position of an edge of said medium (figure 1, photo sensor 11, edge analysis 4); wherein said liquid ejecting apparatus repeats an operation of detecting the position of said edge with said detecting means (paragraph 15), an operation of feeding said

medium with said feed mechanism, and an operation of ejecting the liquid onto said medium from said ejection head that is moving; wherein, in accordance with the position of said edge that has been detected, said liquid ejecting apparatus changes at least either one of a start position and an end position for ejecting the liquid from said ejection head that is moving (paragraph 15); and wherein, if the position of said edge was not detected, said liquid ejecting apparatus sets said start position or said end position to a position that has been established in advance (paragraph 21).

**Claim 13:**

- A liquid ejecting apparatus according to claim 1, wherein the liquid is ejected with respect to an entire surface of said medium (figure 1).

**Claim 14:**

- A liquid ejecting apparatus according to claim 1, wherein said detecting means includes light-emitting means for emitting light, and a light-receiving sensor for receiving said light that moves in a main-scanning direction in accordance with the movement of said light-emitting means in said main-scanning direction; and wherein the position of said edge is detected based on a change in an output value of said light-receiving

sensor caused by the light emitted from said light-emitting means that moves in said main-scanning direction passing across said edge (figure 3).

**Claim 16:**

- A liquid ejecting apparatus according to claim 1, wherein said detecting means is provided on a movable moving member provided with said ejection head (figure 1, sensor 11 disposed on carriage 13).

**Claim 17:**

- A liquid ejecting apparatus according to claim 16, wherein, while said moving member is moved in a main-scanning direction, the position of said edge is detected based on a change in an output value of said light-receiving sensor caused by the light emitted from said light-emitting means that moves in said main-scanning direction passing across said edge, and the liquid is ejected from said ejection head onto said medium (figure 1, paragraphs 12-13).

**Claim 18:**

- A liquid ejecting apparatus according to claim 1, wherein said liquid is ink; and wherein said liquid ejecting apparatus is a printing apparatus

that performs printing on a medium to be printed, which serves as said medium, by ejecting the ink from said ejection head (figure 1).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Egawa Hiromi in view of Mantell (US 6,189,993).

***Egawa Hiromi teaches a liquid ejecting apparatus comprising:***

- a movable ejection head for ejecting a liquid (figure 1, head 12); a feed mechanism for feeding a medium (figure 1, medium transfer part 3); and detecting means for detecting a position of an edge of said medium (figure 1, photo sensor 11, edge analysis 4); wherein said liquid ejecting apparatus repeats an operation of detecting the position of said edge with said detecting means (paragraph 15), an operation of feeding said medium with said feed mechanism, and an operation of ejecting the liquid onto said medium from said ejection head that is moving; wherein, in accordance with the position of said edge that has been detected, said liquid ejecting apparatus changes at least either one of a start position

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and an end position for ejecting the liquid from said ejection head that is moving (paragraph 15); and wherein, if the position of said edge was not detected, said liquid ejecting apparatus sets said start position or said end position to a position that has been established in advance (paragraph 21).

However, Hiromi does not teach a computer system comprising a main computer unit; a display device that is connectable to said main computer unit; and a liquid ejecting apparatus that is connectable to said main computer unit.

It is well-known in the art to have an ejection head connected to a computer system having a display device as taught by Mantell (figure 1 teaches a printing apparatus 10 connected to a personal computer 8).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Hiromi to incorporate the teaching of a personal computer taught by Mantell for the purpose sending print data to the printing apparatus for printing.

***Allowable Subject Matter***

Claim 21 is allowed.

Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

\* The primary reasons for allowance for claims 21 and 7-9 are the inclusion of the limitations of "if the position of said edge was not detected, said liquid ejecting apparatus determines said start position or said end position based on a single position of said edge that was detected in the past and a **predicted maximum skew angle of said medium**".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamson D. Nguyen whose telephone number is 571-272-2259. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on 571-272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lamson D Nguyen/  
Primary Examiner, Art Unit 2861